REMARKS/ARGUMENTS

Claims 1-25, 29, 31 and 33-36 are pending in this application. New claim 36 has been added, and claims 26-28, 30 and 32 have been canceled.

The specification and claims 6 and 12 have been amended as suggested by the Examiner. The Examiner is thanked for the helpful suggestions. New claim 36 does not add new matter, and is supported by the specification on page 11, paragraphs 33-35.

It is noted with appreciation that claims 34 and 35 are allowed, and that claims 12, 13, 29, 31 and 33 were indicated as allowable if rewritten in independent form. Claims 29, 31 and 33 have been so amended. Claim 29 has also been amended to clarify that the host doesn't switch to the marriage ID until after it has sent it to the human interface device.

Invention The present invention is directed to wireless synchronization of a human interface device (e.g., keyboard, mouse, etc.) to a host. The host and interface device first acknowledge each others presence, such as by using a first spread spectrum pattern or some other wireless communication. After the acknowledgment, a different spread spectrum pattern for further exchange of data is determined. In the example set forth on pages 10-11 of the application, the host scans for devices by hopping sequentially in 4ms time slots, with the device scanning by hopping sequentially in 8 ms time slots, so that eventually the two will meet. After acknowledgement, a new hop sequence is determined using the low 6 bits of the "marriage ID" (the ID established for the connection).

Rejection of claims 1, 2, 4-11, 14-19, 20, 21-25 over Nahi (6,166,734) in view of Riazi (6,748,005).

Nahi shows establishing wireless communication between a portable display tablet and a computer using spread spectrum technology. The office action acknowledges that Nahi doesn't disclose determining a spread spectrum pattern after acknowledgment. The undersigned reviewed the cited sections, and also searched the entire patent, and did not find any mention of synchronization at all.

Riazi is cited to show determining a spread spectrum pattern after acknowledgment, with reference to col. 2, lines 11-24, col 10, lines 17-44. Riazi shows a

stripped-down laptop (handheld terminal) with display, keyboard and mouse, but without the internal drives and processors which are located at a desktop. This provides a light device which can be carried around the house and communicate wirelessly with the computer. The communication is done by using a selected group of 5 channels.

Riazi first has the base station hop through 80 channels, listening for a request to send (RTS) signal from the handheld terminal. Also, groups of 5 adjacent channels are cataloged (col. 10, lines 27). The available groups of channels are sent to the handheld terminal. The handheld terminal assesses the channel quality using an echoed RTS signal. The handheld then starts transmitting on a selected group of 5 channels. The handheld terminal continually evaluates the quality of channels, and tells the base station each time what next group of channels it will hop to (see col. 9, lines 41-51, col. 10, lines 39-44).

Riazi does not send a spread spectrum modulation pattern. Rather than sending a pattern for future hopping, it determines quality continuously, and then transmits the new group of 5 channels. The base station never knows in advance what the pattern of frequency hopping will be, and neither does the handheld terminal. This is different from standard frequency hopping, which hops from single channels, and does so rapidly, so that poor quality on any one channel it happens to hop to won't significantly affect the data. Rather, Riazi is periodically switching channels used. This is required because Riazi needs to stay on a channel for awhile, long enough to send a sub-frame of video, and do switching during horizontal sync pulses (see col. 9, lines 20-22, 29-32).

Thus, Riazi does not send "a spread spectrum modulation pattern" after acknowledgement, as required by claim 1 and its dependent claims. With respect to claim 20 and its dependent claims, Riazi does not show the handheld unit "establishing a spread spectrum modulation pattern" as required by claim 20. Rather, as noted above, the channels are tested and a new group of frequencies is decided one at a time, without a pattern being established in advance.

Nahi does not show the elements missing from Riazi. The combination would not provide the missing pattern, since Nahi simply says spread spectrum is used. Thus, to one of skill in the art, either (1) Riazi would not be combined with Nahi because it is not a traditional

spread spectrum method, or (2) the method of Riazi would be incorporated in Nahi, yielding the technique of testing the channels each time between the components of Nahi, thus also not showing the determination of a spread spectrum pattern after acknowledgment.

Rejection of claim 3 over Nahi (6,166,734) in view of Riazi (6,748,005) and Carrender (5,850,187)

Claim 3 is believed allowable for the same reasons as set forth above with respect to claim 1. Carrender does not provide the missing determination of a spread spectrum pattern after acknowledgment. Carrender shows reading object tags, using direct sequence spread spectrum in one embodiment.

Rejection of claims 26, 27, 30, 32 over Dehner (US Pat. Appln. 2003/0035464) in view of Riazi (6,748,005)

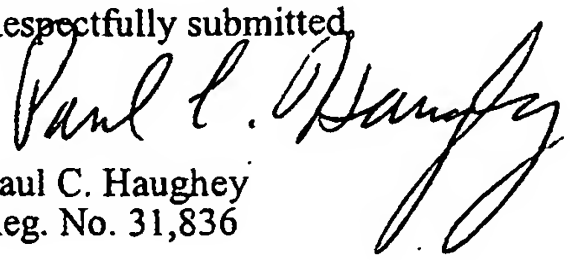
These claims have been canceled.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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